

ART. XVIII.—*Contributions to the Flora of Australia*,  
No. 26.<sup>1</sup>

BY

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[Read 13th December, 1918].

ACACIA GLANDULICARPA, F.M.Reader. (Leguminosae).  
“Hairy Pod Acacia.”

Whipstick Forest, near Bendigo. Collector, David J. Paton,  
September, 1917. A native of Victoria, previously only recorded  
from the Mallee.

CYNOSURUS ECHINATUS, L. (Gramineae). “Rough Dog’s Tail Grass.”

Mentone, Collector, J. R. Tovey, December, 1916, Ferguson, near  
Beech Forest. J. Murchison, February, 1917. New localities in  
Victoria for this introduced grass, which has previously been  
recorded from the Drouin district only.

CROWEA EXALATA, F. v. M. (Rutaceae). “Crowea.”

Whipstick Forest, near Bendigo, D. J. Paton, December, 1916.  
This is a new locality in Victoria for this plant. It had previously  
been recorded from the east and north-eastern localities only.

Mr. Paton says that the plant is fairly abundant in the Whip-  
stick Forest, in two or three localities, notably near Eaglehawk,  
whence the present specimens are taken. It seems to be associated  
with the Mallee-like flora of the Whipstick, as I have not observed  
it on the southern side of Bendigo, where the flora is of a different  
type. As found here it is a low erect or straggling shrub, seldom  
attaining three feet in height, and often much less. November and  
December is the best flowering period, though a few flowers may be  
gathered at almost any season of the year.

*DRAKAEA HUNTIANA*, F. v. M. (Orchidaceae). "Tiny Hammer Orchid."

Cravensville, R. S. Rogers, December, 1917. A new record for Victoria of this rare orchid, which was first described from specimens found on Tingiringi mountain, New South Wales, in 1889, by Bauerlen.

*ERICA ARBOREA*, L. "Tree Heath." (Ericaceae).

Selby, C. French, junr., October, 1917.

Becoming very common along the Gembrook line. It was first recorded at Wheeler's Hill (J. W. Andas), and Beaconsfield (Mrs. Dancocks), and must now be regarded as definitely naturalised. The plant has no injurious properties, and is a decorative shrub, which has escaped from gardens. As Epacrideae in Victoria take the place of Ericaceae in England, it will be of interest to see to what extent this introduced *Erica* will oust the native Epacrideae.

*HYPERICUM TETRAPTERUM*, Fries. (Hypericineae).

Government House Domain, Melbourne, P. F. Morris, January, 1917.

This plant, a close relative of the St. John's Wort, is a native of Europe and North Asia, may be classed as an exotic not yet sufficiently established to be considered naturalised.

*INULA GRAVEOLENS*, Desf. "Stinkwort." (Compositae).

Tyabb, Victoria, A. S. Kercrouse, May, 1917.

This plant, which is proclaimed under the Thistle Act for the whole State, is now evidently spreading in the above district.

*LACTUCA SCARIOLA*, L. "Prickly Lettuce." (Compositae).

Near Deniliquin, N.S.W., per Mercantile Land and Finance Co. Ltd., April, 1917.

A native of Europe and Central Asia. It is an annual or biennial weed of no economic value, and apt to be spread readily by seed. Sheep will eat it down, particularly when it is young. This plant was recorded as a naturalised alien in the northern parts of Victoria in 1913, and is now evidently spreading in New South Wales.

*LEPIDIUM VIRGINICUM*, L. (Cruciferae). "Virginian or Wild Peppergrass."

Mt. Wycheproof, Rev. W. W. Watts, November, 1916.

A new locality for this introduced plant. It is a native of North America.

*LOBELIA ERINUS*, var. *GRACILIS*, L. (Campanulaceae) (Lobeliaceae). "Prickly Lobelia."

Scrub near Lake Margaret Power station, Tasmania, T. B. Moore, January, 1917.

This handsome Lobelia is already a naturalised alien in Victoria, and may also become a naturalised alien in Tasmania.

*LORANTHUS PENDULUS*, Sieber. (Loranthaceae). "Hanging Mistletoe."

Diamond Creek, C. French, junr.

Growing in fair abundance on such introduced plants as *Robinia pseudacacia* and *Cytisus proliferus*. Other instances of the spread of native mistletoes to introduced trees have already been recorded.

*LYCHNIS CORONARIA*, Desr. (Caryophyllaceae). "Rose Campion"

Anderson's Creek, Hazeldene, 29/1/1917, J. W. Audas.

Spreading rapidly in this locality. A native of South Europe and Asia Minor.

*MESEMBRYANTHEMUM LAXUM*, Haw. "Loose-flowered Pigs-face."  
(Ficoideae).

Burwood, J. W. Audas, 17/8/1917. Growing in fallowed land and in process of naturalisation.

*PARONYCHIA CHILENSIS*, D.C. "Chilian Whitlow Wort."  
(Caryophyllaceae) (sub order, Illecebraceae).

Moonee Ponds, J. P. McLennan, 1909. Eldorado, H. B. Williamson, No. 1454. Werribee River, C. French, junr, January, 1917. Near Diggers' Rest, C. French, junr., May, 1917.

This plant, a native of Chile, may now be considered to be established as a naturalised alien in this State.

## PHALARIS PARADOXA, L. (Gramineae).

Menindie, N.S.W., November, 1916.

A new locality for this introduced plant. It is a native of the Mediterranean Regions.

## ROSA RUBIGINOSA, L. (Rosaceae). "Sweet Briar."

In a tall old plant, 6 ft. high, the tap root was found to have descended 3 ft. in sandy soil, while the largest lateral root extended 6 ft. 6 in., at an average depth of over 2 ft. In the case of this plant, after cutting the stem nine inches below the surface, new shoots appeared above the ground. Usually, however, lateral shoots only arise from the stock a few inches below the ground, and with such young plants a six inch ploughing usually cuts away the roots capable of growth, those left in the ground dying. When the ground is moist and the plants are dragged out with a horse and chain, there is a greater possibility of leaving behind parts capable of developing new shoots, but these can be easily destroyed with a mattock when they appear a few months later.

## SISYMBRIUM ORIENTALE, L. (Cruciferae). "Indian Hedge Mustard."

Foreshore, Geelong, H. B. Williamson, No. 1449, December, 1910. Northcote, W. R. A. Baker, January, 1911. Bank of Yarra, Anderson Street Bridge, W. R. A. Baker, January, 1913. Warracknabeal, E. T. Lukey, November, 1913.

It is a native of Europe and Asia, now widely spread in Victoria. This plant is very easily confused with *Erysimum repandum*, and in some cases records of *E. repandum* really refer to *Sisymbrium orientale*. It is a weed of waste places, but spreads in pastures and cultivated ground if neglected.

## SOLANUM HETERANDRUM, Pursh. (Solanaceae). "Pincushion Nightshade."

Bute, S. Australia, per Professor Osborn, March, 1917. This North American weed is already recorded as a naturalised alien in Victoria and New South Wales, and is now evidently establishing itself in South Australia.

## STATICE THOUINI, Vis. "Thouin's Sea Lavender."

A garden escape at Wycheproof.

A native of the Mediterranean Regions. Coll., Rev. W. W. Watts, Dec., 1916.

*ULEX EUROPAEUS*, L. (Leguminosae). "Furze or Gorse."

An important factor in determining the persistence of perennial weeds during dry summers is the depth to which the roots penetrate. Nevertheless, in the case of gorse, the plant seems to withstand dry seasons, even when the roots penetrate only to a small depth. Thus in one case a green clump four to five years old, 2 ft. 6 in. in height and 4 ft. across, was growing on thin soil, with a hard pan subsoil which the roots were unable to penetrate. Their depth varied from  $4\frac{1}{2}$  to 6 in., without the plant appearing to suffer from the dry summer. On looser soils the roots penetrate much more deeply. The deepest roots were found on a loose soil, with a porous clay sub-soil, in which they attained a depth of 2 ft. 7 in. Under still more favourable circumstances possibly greater depths may be obtained.

*XANTHORRHOEA AUSTRALIS*, R.Br. (Liliaceae). "Grass Tree."

In addition to the resin produced by this plant other products may be obtained from it, some of which may have an economic value. By distilling the resinous leaf bases with water, Mr. Watt, of Cobden, obtained a dark coloured, strongly smelling grass tree oil, which if it could be obtained cheaply and in abundance might be of some value as an insecticide. The oil itself killed every leaf to which it was applied, viz., grasses, St. John's Wort, sunflower, dahlia and onion weed. Unfortunately the oil does not mix with water, and although water shaken up with it acquires a strong smell of the oil, it had no effect when sprayed on plants of St. John's Wort, and also did not affect the grass leaves around them.